WWC Intervention Report U.S. DEPARTMENT OF EDUCATION

What Works Clearinghouse



English Language Learners September 28, 2006

Enhanced Proactive Reading

Program description

Enhanced Proactive Reading, a comprehensive, integrated reading, language arts, and English language development curriculum, is targeted to first-grade English language learners experiencing problems with learning to read through conven-

tional instruction. The curriculum is implemented as small group daily reading instruction, during which English Language Learners instructors provide opportunities for participation from all students and give feedback for student responses.

Research

One randomized controlled trial of *Enhanced Proactive Reading* met the What Works Clearinghouse (WWC) evidence standards and a second randomized controlled trial study met WWC standards with reservations.¹ The two studies included a total of

more than 130 students from four schools in Texas. The studies examined results on reading achievement and English language development.²

Effectiveness

Enhanced Proactive Reading was found to have potentially positive effects on reading achievement and no discernible effects on English language development.

	Reading achievement	Mathematics achievement	English language development
Rating of effectiveness	Potentially positive effects	Not reported	No discernible effects
Improvement index ³	Average: +19 percentile points	Not reported	Average: -1 percentile points
	Range: +2 to +43 percentile		Range: -7 to +5 percentile
	points		points

- 1. The authors report 10 cases of failed assignment due to scheduling conflicts, the implication of which is the study meets WWC standards with reservations.
- 2. The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.
- 3. These numbers show the average and range of improvement indices for all findings across the studies.

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Additional program information

Developer and contact

Vaughn Gross Center for Reading and Language Arts,⁴ College of Education SZB 228, University of Texas at Austin, 1 University Station D4900, Austin, TX 78712-0365. Email: info@texasreading.org. Web: www.texasreading.org/utcrla/. Telephone: (512) 232-2320.

Scope of use

Enhanced Proactive Reading has been implemented with first-grade students. The developers do not indicate if it is applicable to all elementary English language learners. Additional information on the numbers of students, schools, and districts using the intervention is not available.

Teaching

Enhanced Proactive Reading provides 120 daily lessons, each composed of 6–10 short activities, to be delivered throughout

games designed to promote phonemic awareness, practicing letter-sound correspondence for letters or letter combinations, practicing writing letters, and learning the sound of a new letter or letter combination. Each lesson is delivered to small groups of students, lasts approximately 50 minutes (40 minutes for lesson delivery and 10 minutes for oracy practice), and focuses on five content strands: phonemic awareness, letter knowledge, word recognition, connected text fluency, and comprehension strategies. Teachers' instructional practices may include visual aids, gestures, and facial expressions to clarify meaning while teaching vocabulary. Student responses are largely choral, with some individual work. Teachers model new content and monitor students' responses to and progress in the fast-paced lessons.

the school year. Daily activities typically include playing word

Cost

No information is available on the cost of the program.

Research

Two studies reviewed by the WWC investigated the effects of Enhanced Proactive Reading. One study (Vaughn, Cirino, et al., 2006⁵) was a randomized control trial that met WWC evidence standards. The Vaughn, Cirino, et al. (2006) study included 91 students from four schools. The second study (Vaughn, Mathes, et al., 2006) was a randomized controlled trial that met WWC evidence standards with reservations. The Vaughn, Mathes, et al. study included 41 students from four schools.

In the Vaughn, Cirino, et al. (2006) study 91 Hispanic,

first-grade English language learners from Texas received the program as a supplement to their regular reading instruction.⁶ All participants were prescreened to confirm scores below the 25th percentile for first grade on the Letter Word Identification subtest of the Woodcock Language Proficiency Battery. A variety of measures of prereading skills and reading levels were administered.

Vaughn, Mathes, et al. (2006) involved 41 first-grade Hispanic English language learners from 14 classrooms in Texas. The

- 4. The reading and phonological components of the intervention are equivalent to another intervention named Proactive Reading. However, *Enhanced Proactive Reading* includes additional activities geared for English language learners in the areas of language and vocabulary development. Proactive Reading was developed by Mathes and colleagues (2005).
- 5. Following format conventions (first author and date) would give both of these studies identical names (Vaughn, et al., 2006). This report lists the first two authors' names followed by the date to distinguish between the studies.
- 6. Although random assignment was done at the student level and the unit of assignment matched the unit of analysis, the authors investigated the magnitude of classroom-level clustering, and clustering that might have occurred because the intervention was delivered in small groups. In both cases, they found clustering had no important impacts on their findings and analyses are presented using student-level findings.

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Research (continued)

students were randomly assigned to either the treatment or control group.⁷ Participants were included in the study based on low English and Spanish reading achievement. The program was used as a supplement to the regular reading program. Individual

findings in the reading achievement domain were statistically significant and substantively important. The English language development domain had no statistically significant or substantively important findings.

Effectiveness

Findings

The WWC review of English language learner interventions addresses student outcomes in three domains: reading achievement, mathematics achievement, and English language development.⁸

Reading achievement. Vaughn, Cirino, et al. (2006) found no statistically significant effects for any reading achievement measures. However, five of the seven effect sizes, as well as the average effect size, were large enough to be considered substantively important using WWC criteria. Vaughn, Mathes, et al. (2006) found statistically significant differences favoring the Enhanced Proactive Reading students in two of the four reading measures (Word Attack and Passage Comprehension). Further, the average effect size for reading achievement in this study was statistically significant, as calculated by the WWC, and large

enough to be considered substantively important using WWC criteria.

English language development. Neither study found a statistically significant or substantively important effect on English language development.

Rating of effectiveness

The WWC rates interventions as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. The rating of effectiveness takes into account four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention condition and the comparison condition, and the consistency in findings across studies (see the WWC Intervention Rating Scheme).

The WWC found Enhanced
Proactive Reading to have
potentially positive effects
on reading achievement
and no discernible effects
on English language
development

Improvement index

The WWC computes an improvement index for each individual finding. In addition, within each outcome domain, the WWC computes an average improvement index for each study as well as an average improvement index across studies (see Technical Details of WWC-Conducted Computations). The improvement index represents the difference between the percentile rank of the average student in the intervention condition versus the

percentile rank of the average student in the comparison condition. Unlike the rating of effectiveness, the improvement index is entirely based on the size of the effect, regardless of the statistical significance of the effect, the study design, or the analysis. The improvement index can take on values between –50 and +50, with positive numbers denoting favorable results. The average improvement index for the reading achievement domain is +19 percentile points, with a range of +2 to +43 percentile

- 7. The authors report 10 cases of failed assignment due to scheduling conflicts. These students were replaced with alternates prior to onset of the intervention. There was also differential attrition between the two groups, but the authors were able to provide evidence of pretest equivalence for the post-attrition samples.

The WWC found Enhanced Proactive Reading to have potentially positive effects on reading achievement and no discernible effects on English language development (continued)

points. The average improvement index for the English language development domain is –1 percentile points, with a range of –7 to +5 percentile points.

Summary

The WWC reviewed two studies on *Enhanced Proactive*Reading, one that met WWC evidence standards and one that

met WWC evidence standards with reservations. The studies showed potentially positive effects in the reading achievement domain and no discernible effects for the English language development domain. English language learning, an evolving field, is working to establish a research base. The evidence presented in this report is limited and may change as new research emerges.

References

Met WWC evidence standards

Vaughn, S., Cirino, P. T., Linan-Thompson, S., Mathes, P. G.,
Carlson, C. D., Cardenas-Hagan, E., Pollard-Durodola, S.
D., Fletcher, J. M., & Francis, D. J. (2006). Effectiveness of a
Spanish Intervention and an English Intervention for English
Language Learners at Risk for Reading Problems. American
Educational Research Journal, 43(3), 449–487.

Met WWC evidence standards with reservations

Vaughn, S., Mathes, P., Linan-Thompson, S., Cirino, P., Carlson, C., Pollard-Durodola, S., Cardenas-Hagan, E., & Franics, D.

(2006). Effectiveness of an English intervention for first-grade English language learners at risk for reading problems. *Elementary School Journal*, *107*(2), 153–180.9

Additional source:

Mathes, P. G., Denton, C. A., Fletcher, J. M., Anthony, J. L., Francis, D. J., & Schnatschneider, C. (2005). The effects of theoretically different instruction and student characteristics on the skills of struggling readers. *Reading Research Quarterly*, 40, 148–182.

For more information about specific studies and WWC calculations, please see the <u>WWC Enhanced Proactive</u> <u>Reading Technical Appendices</u>.

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^{9.} This article will be published in the November 2006 issue of Elementary School Journal.